Chapter 2
Acute Inpatient Obstetric Services

Maryland Hospital Obstetric Services: Overview and Definition

For planning purposes, hospital obstetric services are defined by a series of specific diagnostic related groups (DRGs). Table 2-1 lists the DRGs that define hospital obstetric services in the State Health Plan. The service includes normal and cesarean section deliveries as well as antepartum diagnoses such as ectopic pregnancy, false labor, and threatened abortion. Gynecologic diagnoses are not included, even though women with gynecologic diagnoses are occasionally treated in obstetric beds or units. More than two-thirds of obstetric admissions are for vaginal deliveries. Of those, 80 percent were without complicating diagnoses or other procedures, and these accounted for 54 percent of all obstetric admissions in 1999. Cesarean sections comprise 20 percent of admissions, and more than half (59 percent) were without complications. Reasons other than births comprise 11 percent of total obstetric admissions.

Supply and Distribution of Obstetrics Services

As of December 2000, there are 47 acute general hospitals in Maryland; 34 of those hospitals have obstetric units. The 13 hospitals that currently do not operate an obstetric service are listed in Table 2-2.

Table 2-3 shows hospitals[9] with obstetric services by jurisdiction and region, the number of licensed obstetric beds at each, system membership, average charge per case, whether the hospital has a neonatal intensive care unit (NICU), and number of discharges for 1999.

The hospitals that currently do not operate an obstetric service are located throughout the state and include three in single-hospital jurisdictions on the lower Eastern Shore, three facilities in Baltimore City, one in Western Maryland, and six facilities in suburban counties immediately surrounding Baltimore and Washington. Six of the 13 hospitals that do not presently offer obstetric services are members of multi-hospital systems with obstetric services available at one or more other member institutions.

[9] Although Sacred Heart Hospital consolidated its system's obstetric service in January of 2000 at Memorial Hospital of Cumberland, it is listed on Table 2-3 to present bed inventory, average charge, and discharges in 1999.

Table 2-1
Diagnostic Related Groups in Maryland Hospital Obstetric Services

DRG Codes	DRG Description	Percent of Total Admissions, CY99
370 & 371	Cesarean section with or without complications	20%
372, 373, 374 & 375	Vaginal delivery with or without complications, or with other procedures	68%
376, 377, 378, 379, 382, 383 & 384	Postpartum diagnoses, ectopic pregnancy, threatened abortion, false labor, other antepartum diagnoses	11%

Source: Maryland State Health Plan, Acute Inpatient Services – COMAR 10.24.10; and Hospital Discharge Abstract Data Base, Calendar Year 1999.

Table 2-2
Acute Care Hospitals Without Obstetric Services: Maryland, December 2000

Hospital Name	Jurisdiction	System Affiliation
Atlantic General Hospital	Worcester County	
Bon Secours Hospital	Baltimore City	
Doctors Community Hospital	Prince George's County	
Dorchester General Hospital	Dorchester County	Shore Health System
Harford Memorial Hospital	Harford County	Upper Chesapeake Hlth Sys.
Fort Washington Community Hosp	Prince George's County	
Good Samaritan Hospital	Baltimore City	MedStar
Kernan Hospital	Baltimore City	University of Maryland
McCready Memorial Hospital	Somerset County	
North Arundel Hospital	Anne Arundel County	University of Maryland
Northwest Hospital Center	Baltimore County	LifeBridge Health
Sacred Heart Hospital	Allegany County	Western Maryland Hlth Sys.
Suburban Hospital	Montgomery County	

Source: Maryland Health Care Commission

Table 2-3
Obstetric Services Inventory, System Affiliation, Charge Per Case and Discharges: Maryland, 1999

Jurisdiction/ Local Health Planning Area	Hospital	Number of Beds (12/2000)	System Affiliation	Avg Charge per Case, CY 1999	NICU (Level III or above)	Obstetrics Discharges CY 1999
Allegany	Memorial of Cumberland Hosp	10	Western Md Hlth System	$3,870		479
	Sacred Heart Hospital	0	Western Md Hlth System	$2,825		635
Carroll	Carroll Co. General Hospital	20		$3,391		1,282
Frederick	Frederick Memorial Hospital	23		$2,661		1,962
Garrett	Garrett Co. Memorial Hospital	4		$3,077		336
Washington	Washington County Hospital	14		$2,510		1,821
WESTERN MARYLAND TOTAL		**71**		**$3,056**		**6,515**
Montgomery	Holy Cross Hospital	82		$3,245	yes	7,301
	Montgomery General Hospital	14		$3,611		915
	Shady Grove Adventist Hospital	59	Adventist Hlth Care	$3,340	yes	5,202
	Washington Adventist Hospital	33	Adventist Hlth Care	$3,954		2,457
MONTGOMERY COUNTY TOTAL		**188**		**$3,538**		**15,875**
Calvert	Calvert Memorial Hospital	8		$3,041		819
Charles	Civista Medical Center	15		$3,100		1,027
Prince George's	Laurel Regional Hospital	10	Dimensions Hlth System	$4,324		993
	Prince George's Hospital Cntr	40	Dimensions Hlth System	$3,517	yes	3,137
	Southern Maryland Hosp Cntr	20		$4,165		1,856
St. Mary's	St. Mary's Hospital	13		$3,369		899
SOUTHERN MARYLAND TOTAL		**106**		**$3,586**		**8,731**
Anne Arundel	Anne Arundel Medical Center	46		$3,647	yes	4,252
Baltimore County	Franklin Square Hospital	57	MedStar Health	$3,981	yes	3,037
	Greater Baltimore Medical Cntr	60		$3,725	yes	5,068
	St. Joseph Hospital	28		$3,166	yes	2,507
Baltimore City	Harbor Hospital	33	MedStar Health	$3,778	yes	1,928
	Johns Hopkins Bayview M. C.	16	Johns Hopkins Hlth System	$4,776	yes	1,379
	Johns Hopkins Hospital	39	Johns Hopkins Hlth System	$4,561	yes	2,236
	Maryland General Hospital	20	Univ of Md Med System	$5,889		977
	Mercy Medical Center	30		$4,144	yes	3,371
	Sinai Hospital of Baltimore	23	LifeBridge Health	$4,542	yes	2,359
	St. Agnes Hospital	31		$4,661	yes	2,269
	Union Memorial Hospital	13	MedStar Health	$4,144	yes	906
	University of Maryland	32	Univ of Md Med System	$5,359	yes	1,621
Harford	Harford Memorial Hospital	9	Upper Chesapeake Hlth Sys	$2,762		726
Howard	Howard Co. General Hospital	32	Johns Hopkins Hlth System	$3,252	yes	3,103
CENTRAL MARYLAND TOTAL		**469**		**$4,159**		**35,739**
Cecil	Union Hospital of Cecil	11		$3,310		798
Kent	Kent & Queen Anne's Hospital	4		$3,149		252
Talbot	Memorial Hospital at Easton	25	Shore Health System	$3,543		1,097
Wicomico	Peninsula Regional Med Cntr	24		$3,225		2,290
EASTERN SHORE TOTAL		**64**		**$3,307**		**4,437**
MARYLAND TOTAL		**898**		**$3,529**		**71,297**

Source: Maryland Health Care Commission (Harford Memorial's obstetric service has been relocated to the new Upper Chesapeake Medical Center.)

The availability of obstetric services has changed over the past several years. Laurel Regional Hospital, located in Prince George's County, opened a unit in the 1980s. McCready Hospital closed its obstetric service in the early 1980s. Prior to 1980, Suburban Hospital closed its obstetric service. More recently, Dorchester General and Sacred Heart Hospitals each closed an obstetric service within the last two years.

Although the focus of this report is on hospital services, birthing centers provide prenatal, delivery, and postpartum services to women with low-risk pregnancies in a home-like setting. Birthing centers may be staffed by obstetricians and/or certified nurse-midwives. They may be located in hospitals or they may be freestanding (possibly associated with a hospital), in which case they are licensed as freestanding birthing centers by the Office of Health Care Quality. There are six licensed birthing centers in Maryland, according to the most recent DHMH inventory. These birthing centers are located in Baltimore City, Anne Arundel County (two), Frederick County, Montgomery County and Calvert County. Birth records show 401 births in Maryland birthing centers in 1997, and 451 in 1998. (The number of non-hospital and non-birthing center births in Maryland was 124 and 139, respectively.)

While birthing centers may offer an attractive option to consumers, hospital-sponsored and non-hospital models may differ with respect to: (1) the services that are provided, (2) the mission and philosophy, and (3) the organizational and financial characteristics. Hospital-sponsored birth centers are growing at a faster rate nationally when compared to non-hospital centers. Additionally, hospital-sponsored centers serve a larger proportion of insured women. [10]

Trends in the Utilization of Obstetric Services

Obstetric service discharges generally have declined over the past decade, as shown in Table 2-4. In 1990, there were a total of 81,184 obstetric service discharges from Maryland hospitals. Data reported for 1999 indicates that the volume of obstetric service discharges declined to 71,454. Average length of stay for hospital obstetric services declined between 1990 and 1996 – from 2.72 to 2.33 days. More recently, there have been some small increases in length of stay – from 2.33 in 1996 to 2.64 in 1999. The declining number of discharges, combined with declining average length of stay over the past decade, has resulted in significant declines in patient days. Although there have been fluctuations, the average daily census (ADC) in Maryland obstetric units declined from 605 to 516 patients per day between 1990 and 1999 (Table 2-6).

[10] Khoury AJ, et.al. Characteristics of current hospital-sponsored and nonhospital birth centers. *Maternal Child Health Journal*; 1997 June; 1(2):89-99

Table 2-4
Trends in Obstetric Discharges by Planning Region:
Maryland, Selected Years, 1990 - 1999

Planning Region	1990	1992	1994	1996	1998	1999
Western Maryland	6,474	6,436	6,418	6,396	6,623	6,515
Montgomery Cnty	16,926	16,492	16,011	16,134	15,590	15,889
Southern Maryland	8,646	9,132	9,214	9,112	8,607	8,761
Central Maryland	44,294	41,698	37,841	35,838	35,769	35,839
Eastern Shore	4,844	4,808	4,545	4,358	4,202	4,450
Maryland Total	**81,184**	**78,566**	**74,029**	**71,838**	**70,791**	**71,454**

Source: Maryland Health Care Commission, Hospital Discharge Abstract Data Base, Selected Calendar Years, 1990 – 1999.

Table 2-5
Trends in Obstetric Service Average Length of Stay by Planning Region: Maryland, Selected Years, 1990 – 1999

Planning Region	1990	1992	1994	1996	1998	1999
Western Maryland	2.29	2.03	1.85	1.98	2.18	2.21
Montgomery Cnty	2.68	2.30	2.05	2.21	2.63	2.70
Southern Maryland	2.64	2.25	2.08	2.34	2.49	2.48
Central Maryland	2.82	1.93	2.19	2.52	2.73	2.76
Eastern Shore	2.66	2.15	1.91	2.14	2.33	2.33
Maryland Total	**2.72**	**2.20**	**2.10**	**2.33**	**2.60**	**2.64**

Source: Maryland Health Care Commission, Hospital Discharge Abstract Data Base, Selected Calendar Years, 1990 – 1999.

Table 2-6
Trends in Obstetric Service Average Daily Census by Planning Region: Maryland, Selected Years, 1990 - 1999

Planning Region	1990	1992	1994	1996	1998	1999
Western Maryland	41	36	33	35	40	40
Montgomery County	124	104	90	98	113	117
Southern Maryland	62	56	52	58	59	60
Central Maryland	342	271	227	240	267	271
Eastern Shore	35	28	24	26	26	28
Maryland Total	**605**	**496**	**426**	**456**	**504**	**516**

Source: Maryland Health Care Commission, Hospital Discharge Abstract Data Base, Selected Calendar Years, 1990 – 1999.

While there is still some debate regarding short hospital stays for obstetric patients, studies continue to reveal that early obstetric discharges after uncomplicated spontaneous vaginal deliveries are safe.[11] However, there is minimal information regarding the impact of early discharge for women who undergo cesarean and assisted vaginal deliveries who may be at increased risk for re-hospitalization, particularly with infectious morbidities.[12]

For Maryland hospitals, cesarean section rates averaged 23 percent in 1999, varying by hospital from 13 percent to 30 percent of total deliveries. Since 1990, the number of cesarean sections in Maryland has declined by 14 percent. As a proportion of total births, cesarean sections in Maryland have remained fairly constant at 22 to 24 percent since 1990. Nationally, the C-section rate was 21.2 percent in 1998.[13] An indication of an appropriate C-section rate is the *Indicator VI: Cesarean Sections,* of the Association of Maryland Hospitals and Health Systems' Quality Indicator Project. This indicator measures total, primary, repeat Cesarean section rates, and rates for vaginal births after cesarean sections. The indicator references the Public Health 2000 goal to decrease total C-section rates to 15 percent.

Rising cesarean section delivery rates and their high costs have been an issue over the past few decades. Examining the factors that affect decisions to use this procedure reveals that mothers with private, fee-for-service insurance have higher C-section rates than mothers who are uninsured or are covered by staff-model HMOs.[14] Additionally, higher C-section rates in non-whites and lower C-section rates in the uninsured may reflect differences in patient preferences or expectations. Women of lower socioeconomic status and those who have a lower maternal level of education attainment tend to have fewer C-sections.[15]

Cost Efficiency of Obstetric Services

The average charge per case for obstetric admissions in Maryland in 1999 was $3,696[16], and ranged among hospitals from $2,510 at Washington County Hospital, to $5,889 at Maryland General Hospital, as shown in Table 2-3. The average charge per case for the major payers is shown in Table 2-7, ranging from $3,578 to $3,913 in 1999. The major payers of obstetrics discharges are HMOs, Medicaid HMOs, commercial insurance, Blue Cross, and Medicaid. These payers accounted for 93.5 percent of obstetric discharges in 1999.

[11] Bheram S et.al. Implementation of early discharges after uncomplicated vaginal deliveries: maternal and infant complications. *South Med J*; 1998, June; 91(6):541-5

[12] Lydon-Rochelle M et.al; Association between method of delivery and maternal rehospitalization. *JAMA*; 2000 May10; 283(18):2411-6

[13] *National Vital Statistics Report;* March 28, 2000; Vol.48, No.3

[14] Keeler EB, Brodie M. Economic incentives in the choice between vaginal delivery and Cesarean section. *Milbank Q*; 1993; 71(3):365-404

[15] Onion DK et.al. Primary cesarean section rates in uninsured, Medicaid and insured populations of predominantly rural northern New England. *J Rural Health*; 1999 Winter; 15(1):108-12

[16] Includes charges for obstetric discharges at hospitals without obstetric services.

Table 2-7
Average Charge for Obstetric Cases by Payer:
Maryland, 1999

Payer	Average Charge	Number of Cases
HMO	$3,607	26,862
Medicaid HMO	$3,913	16,439
Commercial Insurance	$3,578	10,098
Blue Cross	$3,676	8,223
Medicaid	$3,854	5,216

Source: Maryland Health Care Commission, Hospital Discharge Abstract Data Base, Calendar Year 1999.

Reasons for high obstetric service costs are related to the random nature of most obstetric admissions. This requires hospitals to prepare for admissions 24-hours a day with on-call staff and a full range of capabilities, regardless of the average number of admissions at smaller facilities. Thus, the nature of obstetrics requires significant volumes to be cost effective. Underutilized staff is not only not cost effective, it is not as experienced, either in normal uncomplicated admissions or in recognizing potential complications.

Obstetric Bed Need Projections: 2000

Under Maryland health planning law, the establishment of a new obstetric service requires Certificate of Need approval. To guide the development of all acute care services, including obstetrics, the State Health Plan (SHP) contains planning policies, a need projection, and criteria and standards for reviewing CON applications.

Need for obstetric services is projected for every county in Maryland, because this service is considered a basic hospital service. The SHP need projection, aggregated by region, is summarized in Table 2-8. The current projections, which reflect a base year of 1994, forecast need for between 606 and 631 beds for the year 2000, based on an assumption of 66,562 discharges and an average length of stay between 2.34 and 2.48 days. Assuming an inventory of 872 licensed obstetric beds in 1996, the SHP projects an excess of between 241 and 266 obstetric beds in 2000. Although actual use in 1999 was higher than the target year forecast, available capacity appears more than adequate to meet this increased utilization. The Commission is updating this need forecast to reflect more current utilization data, revised birth projections, and the implementation of regulations changing licensure procedures for acute care beds under HB 994.

Table 2-8
State Health Plan Obstetric Bed Need Projections by Region: Maryland, 2000

Jurisdiction	Licensed OB Beds (1996)	Gross Need		Net Need	
		Minimum	Maximum	Minimum	Maximum
Western Maryland	74	70	71	4	3
Montgomery County	142	111	117	31	25
Southern Maryland	125	77	80	48	45
Central Maryland	467	299	312	168	155
Eastern Shore	64	49	51	15	13
Maryland Total	**872**	**606**	**631**	**266**	**241**

Source: State Health Plan, Acute Inpatient Services, COMAR 10.24.10., Table A-11., Supplement 3, effective July 1, 1996.

Birth Projections to 2020

The number of births to Maryland residents increased during the 1980s and peaked in 1990, as shown in Table 2-9. Between 1980 and 1990, Maryland resident births increased from 59,833 to 80,199. Since 1990, Maryland resident births have declined, although there was a slight increase in 1998 as compared with 1997. (Information from Maryland's Office of Vital Statistics on the number of births in 1999 was not yet available in July 2000.)

Table 2-9
Trends in Total Births* to Maryland Residents: 1980 - 2000

1980	1990	1991	1992	1993	1994	1995	1996	1997	1998	2000**
59,833	80,199	79,143	77,728	74,934	73,937	72,312	71,473	70,151	71,802	71,131

Source: Division of Health Statistics, Maryland Department of Health and Mental Hygiene; and Maryland Department of Planning, Planning Data Services
*****All births, including birthing centers and home deliveries. ** Projected

Table 2-10 shows the birth, birth rate and fertility rate projections for the next two decades.[17] Birth rates and fertility rates have declined in Maryland and nationally through the 1990s. Fertility rates and birth rates are projected to continue to decline for the next ten years, and modest increases in the number of births is not expected until 2015. According to a recent National Vital Statistics report, the decline in fertility rates in the United States, from 70.9 births per 1,000 in 1990 to 65.6 in 1998, is due to social factors such as recent emphasis on pregnancy prevention, improvements in birth control, and the expanding economic environment, which has been positively linked with higher values placed on education and work due to improved economic opportunity.[18]

[17] Birth rate uses the total population as a denominator, while fertility rate uses the female population between the ages of 15 and 44 years old.

[18] National Vital Statistics Reports, Vol. 48, No. 6, April 24, 2000.

Table 2-10
Actual and Projected Number of Births, Birth Rates and Fertility Rates for Maryland Residents, 1990 - 2020

	Actual		Projected				
	1990	**1995**	**2000**	**2005**	**2010**	**2015**	**2020**
Number of Births	80,199	72,312	71,131	65,714	66,160	69,282	71,772
Birth Rates	17.2	14.7	14.0	12.4	12.1	12.2	12.3
Fertility Rates	68.4	62.8	63.4	59.0	60.1	63.1	64.8

Source: Division of Health Statistics, DHMH; Maryland Department of Planning

Government Oversight of Obstetric Services in Maryland

Government oversight of obstetrics services, including facilities, staff and program operation, is principally the responsibility of seven agencies: the Department of Health and Mental Hygiene, the Board of Physician Quality Assurance, the Board of Nursing, the Maryland Institute for Emergency Medical Services Systems, the Maryland Insurance Administration, the Health Services Cost Review Commission and the Maryland Health Care Commission (MHCC). Although this report focuses on the oversight responsibilities of the MHCC, it is important to consider how obstetric services are regulated by other agencies of state government.

Department of Health and Mental Hygiene (DHMH). The Department of Health and Mental Hygiene, along with the Commission on Infant Mortality Prevention and the Association of Maryland Hospitals and Health Systems (MHA), has formed the Maryland Perinatal Health Partnership to improve hospital-specific perinatal outcomes in Maryland. In January 1995, the Perinatal Clinical Advisory Committee (a group of perinatal health experts appointed by the Secretary of DHMH) developed guidelines for perinatal care which recommended system standards for five levels of perinatal care that refer to obstetric and nursery services (Levels I, II, III, III+ and IV). Self-assessment of the level of care is done voluntarily by each hospital through a survey. Discussion and guidance about these standards is achieved through hospital visits at all Level I and II centers by an interdisciplinary team led by DHMH. In 1998, revised perinatal standards were adopted by the Maryland Institute of Emergency Medical Services Systems (MIEMSS). MIEMSS will be responsible for establishing designation status for high risk maternal and neonatal transports (Level III, III+ and IV centers) following site visits.

The Office of Health Care Quality, an administration within DHMH, is responsible for overseeing the quality of care and compliance with both state and federal regulations in all hospitals and health-related institutions in Maryland. OHCQ licenses these facilities or, for hospitals accredited by the Joint Commission on Accreditation of Healthcare Organizations, OHCQ 'deems' them to meet state licensure standards. It also investigates quality of care complaints from the general public and those referred

by the state's insurance commissioner. OHCQ is also responsible for licensing birthing centers.

Board of Physician Quality Assurance and Board of Nursing. Health occupation regulatory boards associated with DHMH oversee the licensure of health professionals in Maryland. The Board of Physician Quality Assurance (BPQA) will accept and investigate complaints it receives regarding physicians. Additionally, the Board of Nursing oversees licensure of midwives.

Maryland Institute for Emergency Medical Services Systems. The Maryland Institute for Emergency Medical Services Systems adopts standards for designation of trauma and specialty centers, including perinatal referral centers. Designation is the process by which a hospital is identified by the Emergency Medical Services board as an appropriate facility to receive particular referrals, such as high-risk obstetrics or trauma cases. Application for designation as a specialty referral center is voluntary. On a five-level system of care, only levels III, III+ and IV are designated to receive referrals of high risk obstetrics cases and have a neonatal intensive care unit. The centers are surveyed at established intervals to maintain their designation. Level III must be able to treat patients of 26 weeks gestation, and neonates of 800 grams. Level III+ must be able to treat patients of all gestational ages and neonates of any birthweight, and must be within 30 minutes of a Level IV by non-emergency travel. Level IV centers must have subspecialists on staff and available in-house in 30 minutes, and full capabilities for pediatric surgical subspecialty services.

Maryland Insurance Administration. The Maryland Insurance Administration provides for the licensure of insurers and agents, establishment of financial and capital standards for insurers of all types, requirements for rate making and disclosure, and for fair trade practices. Consumer complaints regarding coverage decisions and appeals of medical necessity decisions made by HMOs or insurers are handled through MIA. MIA also enforces the mandate in law for coverage of minimum hospitalization for maternity cases.

Health Services Cost Review Commission. The Health Services Cost Review Commission (HSCRC) reviews and approves rates for Maryland hospitals using peer group evaluation to determine reasonable costs. In determining the reasonableness of rates the HSCRC may take into account objective standards of efficiency and effectiveness. As a result of Maryland's all-payer rate system, hospitals cannot charge lower rates to selected managed care companies, and make up potential losses by charging higher rates elsewhere. Another component of this system is that uncompensated care is estimated for all hospitals, and each hospital receives a reasonable amount in their rate structure to cover uncompensated care.

Maryland Health Care Commission. Through the health planning statute, the Maryland Health Care Commission is responsible for the administration of the State Health Plan, which guides decision making under the Certificate of Need program and the formulation of key health care policies. The Maryland Health Care Commission is also responsible for administration of the Certificate of Need

program through which certain health care facilities and services are subject to review and approval by the Commission. Through the Certificate of Need program, the Maryland Health Care Commission regulates: entry to and exit from the market of certain health care facilities, entry to and exit from the market of certain medical services, and certain actions undertaken by health care facilities.

The MHCC also establishes a standard benefit plan for small employers, and evaluates proposed mandated benefits for the standard benefit plan, including several direct access mandates for obstetric services. Maryland has over 35 required health insurance benefits, or mandates, that must be incorporated into all insured contracts issued in Maryland.[19] The MHCC issues a formal report to the General Assembly by December 1st each year analyzing the financial impact of existing mandates and the medical, social and financial impact of proposed mandates on the costs of health benefits to a large group program, individual insurance, the small group market, and the state employees program. Most, if not all, mandates are not required for inclusion in the small group market's comprehensive standard benefit plan. The MHCC, in its annual evaluation, considers the mandated affordability cap of the small group market's benefit package, which is 12 percent of Maryland's average wage, and the impact of any premium increases on the small employers. Several mandates directly impact the provision of obstetric services and they include:

- Required obstetric benefits
- Minimum length of stay
- Benefits for routine gynecologic care
- Coverage for direct access to OB/GYN physicians, nurse practitioners and mid-wives

All of these mandates have been incorporated into the small group program by the MHCC. Finally, Maryland law requires insurance carriers to pay for the cost of hospitalization for childbirth for a minimum period of 48 hours for uncomplicated vaginal delivery and 96 hours for uncomplicated cesarean delivery.

Alternative Regulatory Strategies: An Examination of Certificate of Need Policy Options

The options discussed in this section represent alternative regulatory strategies to achieve the policies, goals and objectives embodied in Maryland's Certificate of Need program. The role of government in these options describes a continuum varying from the current role (Option 1), to a more expanded role on one end of the continuum (Option 2), to an extremely limited role on the other end (Option 7). The options below, singly or in combination, represent potential alternative strategies that the Commission considered in the context of conducting this study on the regulation of acute inpatient obstetric services in Maryland.

[19] Federal law exempts self-insured programs from all State mandates, while Maryland law exempts the small group health insurance program from the mandates.

Option 1 – Maintain Existing Certificate of Need Regulation

This option, which is described in Table 2-11, would maintain the Certificate of Need program as currently designed. Under current law, establishing a new obstetric service requires a Certificate of Need, based on Commission review of an applicant's consistency with the State Health Plan policies, standards, need projections, and other review criteria. Pursuant to the passage of HB 994 in 1999, with notification to the Commission, a merged asset multi-hospital system may reconfigure obstetric service beds from one member hospital with an obstetric service to another member hospital that may not have an obstetric service, *provided both hospitals are located in the same jurisdiction, and that the jurisdiction has three or more hospitals*. Obstetric beds may not be relocated across jurisdictions because the State Health Plan currently projects need for obstetric services by jurisdiction and no need is currently projected in any one jurisdiction. Also under current law, closing an obstetric service requires only notification in multi-hospital jurisdictions. However, Commission approval of a Certificate of Need exemption is required for service closure in one- or two-hospital jurisdictions, to assure that access is not unnecessarily compromised.

This option continues to promote the General Assembly's incentives for hospital mergers by allowing merged asset systems the flexibility to reconfigure services, under certain circumstances, without the requirement to obtain a CON. Regarding service closures and the stricter exemption process for closures in one- and two-hospital jurisdictions than for multi-hospital jurisdictions, this option also assumes that the benefits of closing a service in multiple-hospital jurisdictions outweigh the costs of reduced access in areas of possible excess capacity.

Table 2-11
Option 1: Maintain Existing Certificate of Need Regulation

Entity/Location	New Obstetric Service			Close a Service
	New Bed Capacity	Relocate Existing Beds Between Merged Asset System Members		
		Within Jurisdiction	Across Jurisdictions	
Merged Asset System				
Jurisdiction with 3 or More Hospitals	CON	45-Day Notice	Not Permitted*	45-Day Notice/Public Hearing
Jurisdiction with 1-2 Hospitals	CON	Exemption	Not Permitted*	Exemption
Single Hospital				
Jurisdiction with 3 or More Hospitals	CON			45-Day Notice/Public Hearing
Jurisdiction with 1-2 Hospitals	CON			Exemption

*Note: Under HB 994, hospitals in merged asset systems may establish a new service by relocating existing beds within the jurisdiction by a 45 day notice to the Commission (§19-123). However, another provision of the same subsection of the statute prohibits establishing a new service by moving beds across county lines through this notification process. Although merged asset systems are permitted to seek CON exemption for the relocation of services between member hospitals, establishing a new obstetric service through relocation of beds across county lines is currently precluded by the policy assumptions of the bed need projection methodology in the SHP and the projections of excess bed capacity.

Retaining Commission review of new obstetric services assumes that the cost of establishing a new service may outweigh the benefits to increased access. By controlling market entry, and basing that entry on standards in the State Health Plan, it could be argued that this model of oversight limits choice to a smaller number of providers than would otherwise be the case. However, review of the SHP's geographic access standard shows that Maryland access to obstetric services is currently well above the SHP minimum access criteria. Geographic access to obstetric services is evaluated through analysis of travel times. The SHP establishes a minimum travel time standard for obstetric services. This standard requires that obstetrics services be no more than 30 minutes one-way average travel time under normal driving conditions for at least 90 percent of the population. Currently, 98.5 percent of the female population between 15 and 44 years old is within 30 minutes of a hospital obstetrics unit in Maryland.[20]

Although current policies have potentially controlled the supply of obstetric units and beds, competition between hospitals is still a major factor that could increase capital expenditures, particularly for obstetrics services. Many hospitals have modernized their obstetrics services in recent years.

[20] *An Analysis and Evaluation of Certificate of Need Regulation in Maryland-Working Paper: Acute Inpatient Obstetric Services*, Maryland Health Care Commission, July 21, 2000, Appendix B maps.

Although managed care has reduced the potential for overutilization, competition among hospitals for managed care contracts is an aspect of the market that may have the opposite effect by providing an incentive to add new programs. CON can, therefore, help to ensure a rational, planned growth in capacity in the system.

Option 2 – Expand Certificate of Need Regulation

Under current health planning law, the closure of an obstetric service requires either a 45-day notice or an exemption from CON review. Upgrading MHCC's role in prior approval of obstetric service closures is a second alternative regulatory strategy. A finding by the Commission that exempts a proposed hospital service closure from CON review is currently needed in jurisdictions with one or two hospitals; only notice to the Commission and a public hearing is necessary for a service closure in a multiple hospital jurisdiction. Option 2 would strengthen current oversight of obstetric service closures by requiring hospitals in multiple hospital jurisdictions to obtain an exemption to exit the market. (See Table 2-12.)

Table 2-12
Option 2: Expanded Certificate of Need Program Regulation

Entity/Location	New Obstetric Service			Close a Service
	New Bed Capacity	Relocate Existing Beds Between Merged Asset System Members		
		Within Jurisdiction	Across Jurisdictions	
Merged Asset System				
Jurisdiction with 3 or More Hospitals	CON	45-Day Notice	Not Permitted	Exemption
Jurisdiction with 1-2 Hospitals	CON	Exemption	Not Permitted	Exemption
Single Hospital				
Jurisdiction with 3 or More Hospitals	CON			Exemption
Jurisdiction with 1-2 Hospitals	CON			Exemption

This option supports placing more public policy emphasis on ensuring geographic access to obstetric services, particularly for vulnerable populations. Although recent hospital closures in Baltimore (Liberty Medical Center, Children's Hospital and Church Hospital) did not involve obstetrics services, the potential impact of future hospital closures on access for some of the city's most vulnerable women, those with fewer transportation options or support services, must be considered. The current

CON rules allow hospitals in multiple hospital jurisdictions, including Baltimore City, to close without government oversight. Requiring the same level of review for multiple hospital jurisdictions as now exists in one- or two-hospital jurisdictions would allow public review and community input

into the potential impacts and solutions of the closure of an obstetrics unit in all the areas of the state. On the other hand, this option modifies previous efforts at CON liberalization by reimposing some level of review (i.e., exemption) that was previously eliminated from statute.

Option 3 – Maintain Existing Certificate of Need Regulation, With Regional Need Projection

This option involves changing the policies in the bed need projection methodology to project need for obstetric services on a regional rather than a jurisdictional basis. Currently the SHP projects need for obstetric beds on a jurisdictional (county) basis, and CON applications are reviewed against the standards and policies in the SHP. A merged asset system may currently, through only a notification letter, move beds between hospitals in the same *jurisdiction,* because the total number of beds in the jurisdiction does not increase. But moving beds to a member hospital in another jurisdiction would change the number of additional beds in two jurisdictions, and is precluded as long as the SHP projects excess capacity, i.e., no need, at the county level. If the need projections were instead to be developed on a regional basis, beds could be reallocated among the members of a merged asset system in the same *region* without changing the number of beds in the planning area. The change is illustrated in Table 2-13. Because a provision added to the statute by HB 994 (1999) prohibits establishing a new service by moving beds across county lines, this option requires both a statutory and a regulatory change.

Table 2-13

Option 3: Maintain Existing CON Program Regulation, With Regional Need Projection

Entity/Location	New Obstetric Service			Closure of Service
	New Bed Capacity	Relocation of Beds Between Merged Asset System Members		
		Within Jurisdiction	*Within Region*	
Merged Asset System				
Jurisdiction with 3 or More Hospitals	CON	45-Day Notice	45-Day Notice	45-Day Notice/Public Hearing
Jurisdiction with 1-2 Hospitals	CON	Exemption	Exemption	Exemption
Single Hospital				
Jurisdiction with 3 or More Hospitals	CON			45-Day Notice/Public Hearing
Jurisdiction with 1-2 Hospitals	CON			Exemption

Option 4 – Modified Certificate of Need Oversight

Another option is to change the standards under which proposals to establish new programs are reviewed under existing CON procedures, while retaining Commission authority to set standards for access, quality, and cost effectiveness.[21] This option could be achieved by changing the State Health Plan to remove the threshold need requirement, making it possible for the Commission to review a Certificate of Need application for a new obstetric service even if the SHP's need methodology indicates no need for additional obstetric beds. This would allow an applicant to make a case that the benefits of an additional program outweigh the potential negative impacts.

Currently, policies in the SHP elevate the need projection formula to a 'threshold' status, such that a CON application will be accepted for review by the Commission *only if* the need methodology identifies a need for additional beds. Once accepted for review, under this current framework, the application is then evaluated against all standards and review criteria regarding access, quality, and cost effectiveness.

The basic principle behind Option 4 is a different approach to need and access for basic obstetric services. Option 4 uses an implementation strategy requiring revisions to the State Health Plan, but no statutory change. Under this model, the review process changes conceptually from a review based on projected need for additional capacity, to a review based on public policy objectives regarding quality, access, and cost efficiency. Option 4 supports the elimination of the SHP's threshold need requirement, but will still require an applicant to demonstrate that the proposed project is needed. Alternative criteria regarding need will be developed to better address the evolving role of State oversight. As the role of need changes, so too will the other planning principles. The revision of the State Health Plan will include development of new or revised criteria related to cost effectiveness, quality of care, impact of a new program on existing ones, and facility closures and consolidations. Although obstetrics is a basic hospital service, it has a link with specialized service component, as evidenced by the State's perinatal referral system and neonatal intensive care (NICU) services. Thus, approval of new services should be based on criteria and standards consistent with the principles and standards for the perinatal system and the Commission's NICU plan chapter for a well-planned system of care. The additional criteria and standards for approval of a new obstetric service will become part of the State Health Plan

[21] Option 4 originally contemplated reducing oversight of market entry by changing the statute to allow review and potential approval of a new obstetric service through a process similar to the existing CON exemption process, which is now used for other actions deemed desirable by the General Assembly when certain circumstances are present. Option 4 was modified from the original approach in the working paper after review of the public comments received during the public comment period. The modified Option 4 was described in "*An Analysis and Evaluation of Certificate of Need Regulation in Maryland: Acute Inpatient Obstetric Services, Response to Written Comments on the Staff Recommendation*"; Maryland Health Care Commission; October 25, 2000.

(COMAR 10.24.10), and as such will be adopted according to the rules for regulatory changes.

For merged asset systems, the Commission's current rules regarding relocation of existing beds or services within a system would be maintained. These rules require a review of a CON exemption request for the reallocation of obstetric beds to a member hospital without this service. Working within the current statutory framework of CON exemption for reallocation of existing bed capacity among merged asset system hospitals *through a review and a finding by the Commission* is consistent with procedural incentives given to merged asset hospital systems since 1985. Under the current State Health Plan, an exemption finding cannot permit bed reconfigurations between system members in different jurisdictions, since obstetric bed need is projected on a jurisdictional level, and a CON exemption cannot be inconsistent with the State Health Plan. For hospitals not in a merged asset system, Option 4 retains the CON requirement for a new obstetrics service but removes the threshold need requirement.

Option 4, if approved, will not result in automatic approvals of new programs. A major advantage of Option 4 over removing obstetrics from CON coverage is that some level of Commission review and approval of proposed new obstetric services would still be required. This continuing oversight protects the public interest, but also gives providers significantly more flexibility.

In summary, Option 4 represents a model for modified oversight of proposals for new hospital obstetric services that is responsive to the changing health care environment. Option 4 offers several advantages over both complete deregulation from CON and over keeping the current system with no changes, and will allow for fundamental changes in the review process, while still retaining some authority and policy role in issues of access, quality, and cost effectiveness. In this way, the Commission can respond to the changing health care environment and still retain the public policy benefits that result from its present level of health system oversight.

While important public policy objectives could continue to be met through a revised State Health Plan, it is likely that many of the hospitals currently without an obstetric service would seek to establish a service, and many of the same implications of deregulation, Option 7, would apply here. A preview of the results of such a change in current regulation may be found in the recent experience in Ohio, which eliminated Certificate of Need review for obstetrics services as part of a larger deregulation plan. The CON program was replaced with a Notice of Intent requirement, similar to this option, but which requires no governmental action or authority. In Ohio, acute care institutions must submit a Notice of Intent to establish a new obstetric or normal newborn/neonatal intensive care program, or to upgrade an existing service. Before the start of operations, hospitals must address maternity licensure standards and quality standards for obstetric and nursery services. For example, each institution must provide newborn care services commensurate with the level of obstetric care services provided, and identify this level of care to the Ohio Director of Health. The hospital must submit a written service plan that identifies

the level of care given to women and newborns based on the current guidelines from the American Academy of Pediatrics and the American College of Obstetricians and Gynecologists for perinatal care. In addition, each program must meet the design guidelines for physical space and equipment as set forth by the American Institute of Architects (AIA) for obstetric and newborn care service, respectively. However, the Ohio planning agency retains no authority to approve or deny proposed new services. Prior to deregulation there were already 1,283 *excess* obstetric beds in Ohio, according to the Ohio Department of Health. In less than three years following deregulation, ten hospitals added a new obstetric program.[22] Specialty "boutique" hospitals are appearing in Ohio, including maternity hospitals.[23]

Option 5 - Deregulate From Certificate of Need Regulation, Create Data Reporting Model

Another option for obstetric service regulation involves replacing the CON program's requirements governing market entry and exit with a program of mandatory data collection and reporting. Deregulation through elimination of the CON requirement for obstetric services is discussed in detail in Option 7, and the implications of that option apply here. Option 5 supports the role of government to provide information in order to promote quality health services. Performance reports, or "report cards" as they have come to be called, are intended to incorporate information about quality into decisions made by both employers and employees in their choice of health plans, and by consumers whose health plans permit a measure of choice in providers. Performance reports can also serve as benchmarks against which providers can measure themselves, and seek to improve quality in any areas found deficient. As such, report cards may both inform consumer choice and improve the performance of health services. Report cards for obstetric services could be implemented in at least two ways: public report cards designed for consumers, or performance reports designed to provide outcomes information and best practice models for providers.

- **5A - Public Report Card for Consumers Specific For Obstetric Services**

This option calls for the Commission to create a vehicle for public reporting of basic service-specific information in a report card style format, promoting consumer education and choice. Obstetrics report cards could be designed to report on facilities, physicians or provider groups, or a combination. In response to a 1999 legislative mandate, the development and implementation of hospital and ambulatory surgery facility report cards, similar to the HMO report cards currently produced by the Commission, is now underway. Therefore, this option could be considered a component of the planning for hospital and ambulatory surgery facility report cards.[24]

[22] *Activity Report for Ohio Through March 31, 1998*; Bricker & Eckler, LLP

[23] *Ohio's Health Care System After Deregulation; A Report to the Ohio General Assembly by Ohio's Health Service Agencies (HSAs);* Ohio Association for Areawide Health Planning, Inc.; February 10, 2000

[24] The Maryland Health Care Commission's *Report on the Hospital/Ambulatory Surgical Facility*

This option supports the view that the role of government is to provide information when not readily available elsewhere to consumers, and to assist consumers in making educated choices. However, a service-specific report card may require additional mandatory data collection by hospitals, depending on the obstetric-specific features or indicators required for the report. There are several examples of programs that collect outcome measures or quality indicators. The Joint Commission on Accreditation of Healthcare Organizations (JCAHO) accredits hospitals on a voluntary basis (although some states, including Maryland, require JCAHO accreditation for licensure). In 1997, JCAHO began a new initiative to use outcomes and other performance measures in the accreditation process called ORYX. The Association of Maryland Hospitals and Health Systems' Quality Indicator Project is a research effort aimed at providing tools to hospitals for continuous quality improvement. A hospital is given feedback on how its own outcome-based clinical indicators compare with the aggregate rate for similar hospitals. The HEDIS data set for HMOs is well established, but only half a dozen of the HEDIS measures relate to use of services for obstetric care. To do comparative performance reporting in this area, the MHCC would need to explore whether a generally accepted and validated data set exists or would need to be developed. The Commission's hospital and ambulatory surgery facility steering committee has not addressed service-specific content issues of the hospital report cards.

While there are well established consumer reports for automobiles and appliances, the health care industry is only beginning to explore the utility of such evaluations in health care. Data on the usefulness of performance reports to consumers is inconclusive. Research indicates consumers want information on provider performance, and that they are able to research this type of information.[25] How consumers then use this information in decision making is less well understood. A recent MHCC survey of state employees' use of the HMO consumer report card indicates the report is used in conjunction with other resources such as information on location and cost. Reasons for limited use of performance reports include constraint in choice,[26] mistrust of the data,[27] and difficulty understanding the information.[28,29] The best use of the health care report card model may be to improve performance over time in those areas measured.

Both the Virginia Hospital and Healthcare Association and the Missouri Department of

Performance Evaluation System (January 1, 2001) recommends that consideration be given to a separate report card specific to hospital obstetric services. The report also states that further research will need to be conducted on preparing an obstetrics report card (page i).

[25] Edgman-Levitan S, Cleary PD; *Health Affairs*; 1996;15:42-56.

[26] Schoen C, Davis, K. Erosion of Employer Sponsored Health Insurance Coverage and Quality. New York NY: Commonwealth Fund: 1998.

[27] Robinson S, Brodie M. Understanding the quality challenge for health consumers: The Kaiser/AHCPR Survey. *Qual Improv.* 1997;23:239-244.

[28] Hibbard JH, Jewwett JJ, Engelmann S, Tusler M. Can Medicare beneficiaries make informed choices? *Health Affairs* 1998;17:181-193.

[29] Jewett JJ, Hibbard JH. Comprehension of quality of care indicators. *Health Care Financing Rev.* 1996;18:75-94.

Health have produced guides to obstetrical services in their states. The guides are targeted to consumers with general and hospital-specific information on cesarean deliveries, hospital obstetric service options, and prenatal and post discharge hospital services, but little outcome data. New York began issuing public report cards concerning cardiac surgery and cardiac surgeons in 1989. Pennsylvania and New Jersey are now also releasing report cards with outcome data for hospital specific and surgeon specific mortality rates. As discussed in the report of the Commission's Technical Advisory Committee on Cardiovascular Services (December 1999), there are positive benefits to public reporting of program outcomes, including significant declines in risk-adjusted mortality, and encouraging providers to strengthen quality oversight. On the other hand, evidence indicates that as a result of the public dissemination of outcome data, referrals of high-risk patients from New York to out-of-state cardiac surgery programs contributed to the decrease in the risk adjusted mortality rates between 1989 and 1992.[30]

- **5B - Provider Feedback Performance Reports**

Under this option the Commission, or another public or contracted private agency, would establish a data collection and feedback system designed for use by providers. Like the report card option, this involves mandatory collection of detailed outcomes and process information from all hospital obstetrics services to measure and monitor the quality of care using a selected set of quality measures specific to obstetric services. The purpose would be to provide feedback on how hospitals and/or providers compare to their peers on relevant issues such as cesarean section rates, and analysis of adverse events. This option is consistent with the recent national policy debate regarding the need for more information and improved accountability for outcomes. While CON is not intended to monitor quality after an approved program begins operation, this option does further that objective. The information could be collected, processed and reported back to providers, as is done with cardiac surgery information in New England or Minnesota. As discussed in the 1999 report of the Technical Advisory Committee on Cardiovascular Services and in the *White Paper on Policy Issues in Planning and Regulating Open Heart Surgery Services in Maryland* (June 2000), the Northern New England Cardiovascular Disease Study Group has developed an approach to reducing mortality in cardiac surgery that involves feedback on outcomes data, training in continuous quality improvement techniques, and site visits to other medical centers. In Minnesota, cardiac surgery programs have organized a common database to help improve clinical outcomes. Experience from these groups indicates that this is a very complex, expensive undertaking. The Technical Advisory Committee recommended the development of an independent consortium in Maryland based on the New England model to develop and implement the system. This model assumes that the health care organizations and systems within which professionals practice can always improve, and that one approach to foster this improvement is to

[30] Omoigui NA, et.al. Outmigration for coronary bypass surgery in an era of public dissemination of clinical outcomes. *Circulation* 1996 Jan 1;93(1):27-33

establish a process for continuous monitoring and feedback.

Option 6 – Deregulate From Certificate of Need Review, Create Licensure Standards

Under this option, the role of government oversight would shift from regulating market entry and exit to monitoring the on-going performance of the service through the development of licensure standards. Currently, acute care hospitals are licensed in Maryland based on compliance with standards developed by the Joint Commission on Accreditation of Healthcare Organizations (JCAHO). The licensure standards developed under this option could reflect, in addition to compliance with JCAHO standards, compliance with Maryland-specific standards based on the work of the DHMH Perinatal Clinical Advisory Committee and the American College of Obstetricians and Gynecologists (ACOG). This option requires the development of separate standards for licensing an obstetric service. Currently, the OHCQ licenses the entire acute care hospital, not individual services. Although similar to Option 4, under the licensure model there presumably would be the implication that non-compliance with standards for the obstetrics service would result in the potential to lose the license for that service.

This option, similar to other options that remove barriers to market entry and/or exit, would likely result in many of the hospitals currently without an obstetric service seeking to establish a service. Thus, the implications discussed under Option 7 would also apply to this option. On the other hand, under this option there would be greater public policy emphasis placed on performance goals. While the CON process provides a tool for examining quality issues before a provider enters the market, it is not now designed to monitor outcomes on an on-going basis.

Option 7 – Deregulate Obstetric Services From Certificate of Need Review

Certificate of Need has been criticized as an ineffective control of cost, access or quality since the times of unrestricted expansion under the fee-for-service era. In Maryland, it could be argued that the HSCRC effectively controls hospital costs, and quality of care is addressed by the standards of MIEMSS, DHMH and the Office of Health Care Quality. Under this option, all CON review requirements related to both market entry and exit would be eliminated, allowing the market to allocate obstetric services, both new services and closures. This option defers to the oversight authority of HSCRC, MIEMSS, DHMH, OHCQ, MIA and BPQA to address issues of cost, quality and access.

Repeal of CON has been associated with increases in supply in several states. This and the recent legislative efforts in Maryland leave little room for doubt that new obstetric services would open in several hospitals following deregulation. While research has not been done to demonstrate how these increases affect the public or existing providers[31], some assumptions may be

[31] *Effects of Certificate of Need and Its Possible Repeal*; Report 99-1; State of Washington Joint Legislative Audit and Review Committee; January 8, 1999.

reasonable and appropriate for assessing the potential impact on access and cost.

For purposes of analyzing the potential impact of deregulation, access to obstetric services under the current system was examined with the assumption that: (1) all hospitals not now offering the service would do so following deregulation (Scenario 1), and (2) a smaller number of hospitals not now offering the service would do so following deregulation (Scenarios 2 and 3). Geographic analysis of travel times shows that if all 47 acute general hospitals offered obstetric services (Scenario 1), there would be a marginal improvement in geographic access to obstetric services - from the current 98.5 to 99.5 percent of women between 15 and 44 years old would be within 30 minutes of an obstetric service.

In Scenario 2 (the 'high demand' scenario) staff assumed that all hospitals that had not recently closed a service would open one (except Kernan Rehabilitation Hospital, which could be considered a specialty hospital), resulting in ten new obstetrics services in Maryland. Multi-hospital systems may be both more and less likely to open a new service if the service is deregulated. On the one hand, systems able to implement plans to reconfigure services have in some instances downsized or closed obstetric services, such as Shore Health System and the Western Maryland Health System, where hospitals share substantial service area. On the other hand, the ability of a system to add an obstetrics service at a member hospital may be viewed as instrumental to capturing market share required to maintain or enhance system viability. Under Scenario 2, the geographic area covered by the additional 12 obstetric units would increase to 99.1 percent for women of childbearing age.[32]

In Scenario 3, the 'low demand' scenario, staff assumed that three hospitals that have recently expressed an interest in obstetrics services (Suburban Hospital in Montgomery County, Doctors Community Hospital in Prince George's County, and North Arundel Hospital in Anne Arundel County) and two more in highly competitive markets where travel times might be an issue, and that are not members of multiple hospital systems (Fort Washington Community Hospital in Prince George's County and Atlantic General Hospital in Worcester County) would open a service. In addition, for purposes of illustration of the effects on access of closure of a rural hospital, staff hypothesized that two hospitals with very low admissions would close their service after deregulation. The two hospitals with the lowest volumes in the state could potentially be considered at risk for closing their obstetric service due to the high costs generated by the low volumes and the need to have staff available 24-hours per day, seven days per week. Both Kent & Queen Anne's and Garrett County hospitals had fewer than 650 patient days in 1999 for an average daily census of two obstetric patients (see Table 2-6).[33] Closure of either of these obstetric services may negatively impact access to the service for residents of those counties. Scenario 3 results in small

[32] Maps illustrating the impacts of Scenarios 1, 2, and 3 on geographic access to obstetric services are included in *An Analysis and Evaluation of Certificate of Need Regulation in Maryland-Working Paper: Acute Inpatient Obstetric Services,* Maryland Health Care Commission, July 21, 2000, Appendix B.

[33] The next smallest obstetric units had over 1,000 patient days; the state average is over 5,000 days.

improvements in geographic access with the five additional obstetric services, as well as increased area in Garrett and Queen Anne's counties that would not fall within the 30 minute travel time standard in this hypothetical situation. Overall, this results in a slight decline in access, to 98.0 percent. Improvements in access in suburban areas likely would not outweigh loss of access if a rural hospital closed its obstetric service.

The potential financial impact of deregulation must be considered. Birth rate projections discussed earlier reveal the potential for relatively stable demand for at least the next 20 years. Thus, any new obstetric service will be re-allocating stable volumes rather than allocating new admissions. New programs would necessarily result in lower volumes at existing programs. Loss of patient volume means losing the revenue associated with those volumes, but only a proportion of the expenses associated with those volumes, reducing net profit margins. New providers would likely be given rates by the Health Services Cost Review Commission at the statewide average. If the nearby providers likely to be most affected were high cost hospitals, a savings to the system would result. If the nearby programs were low cost providers, new providers at the statewide average would result in higher charges, and higher system costs. The HSCRC's new charge per case system has additional implications for an evaluation of financial impact that are yet to be determined.

Duplicating programs that require professional staff already in short supply, and that need to be available 24 hours per day, will add direct staffing costs and indirect overhead to the system. If competition for staff increases, staffing costs could rise. This increasing competition may result in capital expenditures by existing providers to capture market share, as new providers spend money to establish state-of-the-art services. Increasing competition could also potentially leave some hospitals to carry an increasing burden of high risk, high cost patients.

Cost efficiencies could be achieved through greater competition. This may offset the cost pressures of competition, at least in the long run. However, because there are already obstetric services widely distributed geographically, and they are very price sensitive in at least the central Maryland area due to significant competition for market share, it could be argued that there are very few additional price benefits to additional competition. Declining volume at existing services, exacerbated by declining birth rates, and combined with increased competition for staff and state-of-the-art facilities could increase costs at existing providers and/or the state's health care system.

Due to the potential impact on existing providers, changes to state policy to support a free market approach to hospital obstetrics services may require changes in the way the HSCRC sets rates for this service. This may require financial support of any hospitals that experience significant changes in obstetric volumes or case mix as a result of deregulation. Instability of the current health care market may jeopardize access under the market place model. Without the ability of the regulatory model to review planned changes, either financial or geographic access could be inappropriately affected. Finally, depending on the structure

of deregulation, there may be potential for the development of freestanding, specialty obstetrics hospitals, as seen in Ohio following deregulation. This could potentially strain the economic balance of existing hospitals in Maryland.

Table 2-14 summarizes the policy options considered by the Commission in evaluating CON regulation for acute inpatient obstetric services.

Table 2-14
Summary of Regulatory Options for Acute Inpatient Obstetric Services

Options	Level of Government Oversight	Description	Administrative Tool
Option 1 Maintain Existing CON Regulation	No Change in Government Oversight	•Market Entry Regulated by CON •Market Exit Through Notice or Exemption	Commission Decision (Certificate of Need/Exemption/ Notice)
Option 2 Expand CON Regulation	Increase Government Oversight	•Market Entry Regulated by CON •Market Exit Through Exemption Only	Commission Decision (Certificate of Need/Exemption)
Option 3 Maintain Existing CON Regulation With Regional Need Projection	Change government Oversight	•Market Entry Regulated by CON and Exemption •Market Exit Through Exemption or Notice	Commission Decision (Certificate of Need/Exemption/ Notice)
Option 4 Modify CON Oversight	Change Government Oversight	•Market Entry and Market Regulated by CON or Exemption	Commission Decision (Exemption)
Option 5 Deregulate from CON Review; Create Data Reporting Model	Change Government Oversight	•No Barrier to Market Entry or Exit	Performance Reports/Report Cards
Option 6 Deregulate from CON Review, Create Licensure Standards	Change Government Oversight	•No Barrier to Market Entry •Market Exit for Non-Compliance with Licensure Standards	Licensure Standards
Option 7 Deregulate Obstetric Services from CON Review	Eliminate government oversight in favor of market focus	•No Barrier to Market Entry or Exit	None

Commission Recommendations

Recommendation 1.0

The Commission should continue its regulatory oversight of acute inpatient obstetric services through the Certificate of Need program.

Recommendation 1.1

The Commission should modify the need projection, review threshold, and approval policies found in the State Health Plan to permit its consideration of proposed new obstetric services.

The Commission recommends retaining the current statutory and regulatory framework for the consideration of proposed new acute inpatient obstetric units, with a significant change in the way the State Health Plan's need projection methodology is applied in CON review. The Commission recommends changing the State Health Plan to remove the threshold need requirement to make it possible for the Commission to consider the merits of proposals to develop new obstetric services. If the Commission changes how it uses the projection of obstetric bed need in each jurisdiction—from a barrier to considering a new program at a hospital, to one of many factors used in the analysis of such a proposal—then the existing CON procedures provide two appropriate and well-established pathways through which to accomplish the review.

If a merged asset hospital system wishes to establish an obstetric service at a member hospital currently without the service, current statute permits merged hospital systems to move obstetric beds from within its system, as a non-specialized acute care service, if the action is not inconsistent with the State Health Plan, and meets the other statutory tests for CON exemption to permit a change in type or scope of services between two members of a merged asset hospital system. Changing the State Health Plan to remove the threshold need requirement will make it possible for the Commission to make such a finding. In addition, since it is the jurisdiction-based projection in the current State Health Plan that precludes increasing or decreasing capacity in basic acute care services between system members in different jurisdictions, this plan change would permit systems to seek CON exemption to reconfigure their existing capacity. For hospitals not members of a merged asset system, to establish a new obstetric service would require full CON review. In such a review, existing CON review criteria require an applicant to explicitly analyze and document the impact its proposed program would have on existing obstetric service providers, in such areas as the ability to recruit and retain nurses and other key staff, continued access to services by high-risk and indigent mothers, and viability of the existing programs. Due process provisions in

existing CON rules mean that the affected facilities would participate in the review as interested parties, who can take judicial appeal if aggrieved by the Commission's decision. Changes to the State Health Plan, needed to guide the review of a proposal on either the exemption or the full CON level, will be developed with public participation, and will factor in all of the challenges and considerations facing hospitals, and the hospital system, in Maryland.